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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,925	07/31/2003	Yariv Aridor	ROC920020171US1	9659
30206	7590	01/11/2007		
IBM CORPORATION ROCHESTER IP LAW DEPT. 917 3605 HIGHWAY 52 NORTH ROCHESTER, MN 55901-7829			EXAMINER ROMANO, JOHN J	
			ART UNIT	PAPER NUMBER
			2192	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/631,925

Applicant(s)

ARIDOR ET AL.

Examiner

John J. Romano

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/31/2003</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims **1-22** are pending in this action.

#### ***Information Disclosure Statement***

1. The Information Disclosure Statements filed on January 21<sup>st</sup>, 2003 has been considered.

#### ***Claim Objections***

2. Claims **1, 2, 11, 12** and **21** are objected to because of the following informalities: the claims refer to "canonically-parsed of" (e.g., see claim 1, line 5, claim 2, line 2), wherein it is unclear what "canonically-parsed" is generated. For the sake of compact examination, the examiner is interpreting the claims to include "representation" (e.g., "canonically-parsed representation of") throughout the examination. Thus, the insertion of "representation" is believed appropriate.

Accordingly, claims **3-10, 13-20** and **22** are objected to for depending on rejected base claims as addressed above. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Independent claim **21** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. A "signal bearing medium" is recited in the claim and specification (see specification, page 16, line14). A product is a tangible physical article or object, some form of matter, which a signal is not. A signal, a form of energy, does not fall within either of the two definitions of manufacture. Thus a signal does not fall within any of the four statutory classes of 101. See Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, Annex IV (c), (signed 26, October, 2005) – OG Cite: 1300 OG 142. Retrieve on <<http://www.upsto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>>.

Additionally, a program product with recordable medium is not necessary yet to be a computer readable medium and recorded/stored with executable instructions.

Accordingly, claim **22** is rejected for at least depending on a rejected base claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims **1-5**, **8-15** and **18-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartz et al., US 7,131,112 (hereinafter **Bartz**) in view of Thomas, US 2003/0167446 (hereinafter **Thomas**).

In regard to claim **1**, **Bartz** discloses:

- *"A method for adapting a standard code base..."* (E.g., see Figure 2 & Column 4, lines 29-31), wherein a method for differencing of two or more documents to determine conflicts among different version, and for other purposes is disclosed.
- *"...parsing a modified version of a first release of a standard code base to generate a canonically-parsed representation of the modified version..."* (E.g., see Figure 3 & Column 5, lines 10-35), wherein character-level differencing pinpoints the actual characters or symbols that differ between the documents or source code.
- *"...generating difference data representative of changes made to...the standard code base using the parsed of the modified version..."* (E.g., see Figure 3 & Column 6, line 61 – Column 7, line 4), wherein differences between the input documents are identified.
- *"...the first release of..."* (E.g., see Figure 4 & Column 9, lines 31-34), wherein the reference document is a previous release (first release).
- *"...and using the difference data in applying the changes made to the first release of the standard code base to a second release of the standard code base."* (E.g., see Figure 7, box 732 & Column 8, line 60

– Column 9, line 13), wherein the changes are applied (box 732) in the specified set.

But **Bartz** does not expressly disclose “canonically parsing” the code or programs. However, **Thomas** discloses:

- “...*canonically parsing...*” (E.g., see Figure 3, diamond 24 & paragraph [0039]), wherein semantic differences are disclosed.

**Bartz** and **Thomas** are analogous art because they are both concerned with the same field of endeavor, namely, a differencing process comprising two documents. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Bartzs’** with **Thomas’s** canonical parsing. The motivation to do so would have been to expose the semantics of the changes as taught by **Bartz** (E.g., see Column 5, lines 18-20).

In regard to claim 2, the rejections of base claim 1 are incorporated.

Furthermore, **Bartz** discloses:

- “...*parsing an unmodified version of the first release of the standard code base to generate a ...parsed of the unmodified version wherein generating the difference data includes comparing the ...parsed representations of the unmodified and modified versions of the first release of the standard code base.*” (E.g., see Figure 4 & Column 9, lines 31-34), wherein the reference document is a previous release (first release) and the changes (differences) are identified.

In regard to claim **3**, the rejections of base claim **1** are incorporated.

Furthermore, **Bartz** discloses:

- "...*canonically parsing...the standard code base to generate a canonically-parsed representation of the intermediate version, wherein generating the difference data includes comparing the canonically-parsed representations of the intermediate and modified versions of the first release of the standard code base.*" (E.g., see Figure 3 & Column 5, lines 10-35), wherein character-level differencing pinpoints the actual characters or symbols that differ between the documents or source code.

But, **Bartz** does not expressly disclose "...*an intermediate version of the first release...*". However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to difference between any two versions including an intermediate version of the first release and the first release. The motivation to do so was disclosed by Bartz (E.g., see Column 8, lines 64-65) wherein changes are between two versions of a project. Additionally, **Bartz** teaches enlistment files (see Figure 8, Column 9, lines 46-66) which are intermediate files.

In regard to claim **4**, the rejections of base claim **3** are incorporated.

Furthermore, **Bartz** discloses:

- "...*the intermediate version of the first release of the standard code base is generated using automated source transformation, and wherein the modified version of the first release of the standard code*

*base is generated by applying manual changes to the intermediate version of the first release of the standard code base.*" (E.g., see Figure 4 + 4a & Column 6, line 30 – Column 7, line 6 ), wherein the developers manual changes are automatically merged into the code base (first release).

In regard to claim 5, the rejections of base claim 1 are incorporated. But, **Bartz** does not expressly disclose "*...wherein generating the difference data includes identifying a plurality of changed semantic components...*". However, **Thomas** discloses:

- "*...wherein generating the difference data includes identifying a plurality of changed semantic components...*" (E.g., see Figure 3, diamond 24 & paragraph [0039]), wherein semantic differences are identified between two documents.

In regard to claim 8, the rejections of base claim 5 are incorporated. Furthermore, **Bartz** discloses:

- "*...includes notifying a user of a change in a changed semantic component.*" (E.g., see Figure 4A & Column 6, line 67- Column 7, line 6), wherein a user is notified (alerted) to a possible conflict among a change.

In regard to claim 9, the rejections of base claim 5 are incorporated. But, **Bartz** does not expressly disclose "*...includes automatically applying a change in a changed*



*semantic component to the second release of the standard code base.”* However,

**Thomas** discloses:

- “...includes automatically applying a change in a changed semantic component to the second release of the standard code base.” (E.g., paragraph [0108] + [0109]), wherein a changed semantic component is automatically applied.

In regard to claim **10**, the rejections of base claim **1** are incorporated. But, **Bartz** does not expressly disclose “...using the difference data in applying the changes made to the first release of the standard code base to a third release of the standard code base.”. However, **Thomas** discloses:

- “...using the difference data in applying the changes made to the first release of the standard code base to a third release of the standard code base.” (E.g., paragraph [0123]), wherein the appropriate delta file is applied to achieve the corresponding version.

In regard to claims **11-15** and **18-20**, this is an apparatus version of the claimed method discussed above, in claims **1-5** and **8-10**, respectively, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Bartz**, (Figure 1), wherein a memory, processor and program code resident in the memory to implement the process are taught.

In regard to claim **21**, this is a program product version of the claimed method discussed above, in claim **1**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Bartz**, (Figure 1 ).

In regard to claim **22**, see Figure 1.

5. Claims **6**, **7**, **16** and **17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bartz** in view of **Thomas** and further in view of Ziebell, US 6,385,768 (hereinafter **Ziebell**).

In regard to claim **6**, the rejections of base claim **5** are incorporated. But, **Bartz** and **Thomas** do not expressly disclose "...*the change is selected from the group consisting of deletion, modification, addition and replacement.*". However, **Ziebell** discloses:

- "...*the change is selected from the group consisting of deletion, modification, addition...*" (E.g., see Column 1, lines 55-57), wherein changes may represent features that have been added, deleted and modified.

**Bartz**, **Thomas** and **Ziebell** are analogous art because they are both concerned with the same field of endeavor, namely, a differencing process comprising two or more documents. Therefore, at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine **Ziebell's** change method with **Bartz** and **Thomas's** version control system to include changes selected from the group of deletion, modification, addition and replacement. One of ordinary skill in the art would have been motivated to include replacement because replacement is just a combination of deleting and adding or modifying. The motivation to do so would have been to manage the change to keep track of modifications in source code and other versioned

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documents across time and across multiple development groups working in parallel with each other as taught by **Bartz** (E.g., see Column 1, lines 34-37).

In regard to claim **7**, the rejections of base claim **6** are incorporated.

Furthermore, **Bartz** discloses:

- "...generating the difference data includes generating at least one XML file, the XML file including a tag for a changed semantic component, the tag identifying the changed semantic component and including an attribute representing the change made to the changed semantic component." (E.g., see Figure 3 & paragraph [0034]), wherein XML files including tags for a changed semantic component including attributes represent changes made.

In regard to claims **16 and 17**, this is an apparatus version of the claimed method discussed above, in claims **6 and 7**, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see **Bartz**, (Figure 1 ).

### ***Conclusion***

6. The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Peleg, US 6,546,552, wherein a difference extraction between two version of data tables is disclosed.
- Hurley et al., US 6,678,882, wherein software system with merge features and isolation for potential changes for re-use is disclosed.

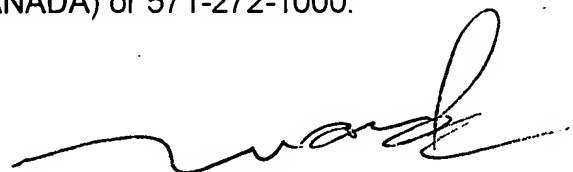
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- Govindugari et al., US 2004/0083199, wherein data transformation, normalization, profiling and validation are disclosed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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